

Title (en)

Binary data regenerator with adaptive threshold level.

Title (de)

Binärdaten-Regenerator mit adaptivem Schwellwertpegel.

Title (fr)

Régénérateur de données binaires à niveau de seuil adaptable.

Publication

**EP 0328266 B1 19940615 (EN)**

Application

**EP 89300610 A 19890123**

Priority

US 15541388 A 19880212

Abstract (en)

[origin: EP0328266A2] A binary data signal (on line 28) is regenerated with respect to three threshold levels (V+, Vopt, V-), one of which (Vopt) is derived from and lies between the other two (V+, V-) so that it is an optimum level for producing a regenerated output signal (on line 32). Two control loops are used to produce the other two threshold levels to produce regenerated signals at (46Q, 50Q) with predetermined error rates, the errors occurring on the two control loops for the two respective states of the binary data signal, whereby the optimum threshold level is maintained regardless of the nature of signal degradation. The arrangement provides rapid performance monitoring (26) which can also be used to adjust other parameters, such as detector bias, equalizer tuning, and clock phase, for optimum performance in an active and ongoing manner.

IPC 1-7

**H03K 5/08**; **H04L 25/20**; **H04L 1/20**; **H04B 10/00**

IPC 8 full level

**H03K 5/08** (2006.01); **H04B 10/07** (2013.01); **H04B 10/556** (2013.01); **H04B 10/67** (2013.01); **H04B 10/69** (2013.01); **H04L 25/03** (2006.01); **H04L 25/06** (2006.01); **H04L 7/033** (2006.01)

CPC (source: EP KR US)

**G06T 1/00** (2013.01 - KR); **H04L 25/063** (2013.01 - EP US); **H04L 25/065** (2013.01 - EP US); **H04L 7/033** (2013.01 - EP US)

Citation (examination)

- ABSTRACT OF NEW TECHNOLOGY FROM THE AIR FORCE SYSTEMS COMMAND. DEPARTMENT OF DEFENSE, USA RADC/01 no. 76-266, 16 June 1976; "Baseband Eye Pattern Monitor", PB 80-976360
- IBM TECHNICAL DISCLOSURE BULLETIN, vol. 21, no. 3, August 1978, pages 1214,1215, Armonk, NY, US; J. Eggenberger et al.: "Adaptive threshold detector"

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DOCDB simple family (application)

**US 15541388 A 19880212**; CA 559751 A 19880224; CN 89101057 A 19890211; DE 68916053 T 19890123; EP 89300610 A 19890123; JP 2773889 A 19890208; KR 890001586 A 19890211